What is claimed is:

1. Apparatus (2, 102, 202) for illumination comprising at least one housing (4, 104) suited for in ground use, which housing (4, 104) contains at least one lamp (20, 120), which lamp (20, 120) is surrounded by reflective means (24, 124), which housing (4, 104) further comprises light changing means (28, 30), which housing (4, 104) comprises control means for controlling at least the lamp (20, 120) and the light changing means (28, 30), **characterized in that** the housing (4, 104) comprises an outer casing (6, 8, 12, 106, 108, 112, 206, 212) which casing (6, 8, 12, 106, 108, 112, 206, 212) comprises at least one diaphragm (262, 362), covering at least one opening (217) in the casing (6, 8, 12, 106, 108, 112, 206, 212), which diaphragm (262, 362) is permeable for moisture for transmission from the inside of the housing (4, 104) to the outside, which diaphragm (262, 362) is water tight from the outside.

2. Apparatus (2, 102, 202) according to claim 1, **characterized in that** the opening (217) in the casing (6, 8, 12, 106, 108, 112, 206, 212) is placed in the lower part of the casing and directed downwards.

3. Apparatus (2, 102, 202) according to claim 1 or 2, **characterized in that** the opening (217) in the casing (6, 8, 12, 106, 108, 112, 206, 212) is placed in the lower part of the casing in a vertical direction.

4. Apparatus (2, 102, 202) according to one of the claims 1-3, **characterized in that** the apparatus (2, 102, 202) comprises at least changeable means (28, 128) for forming the light beam.

5. Apparatus (2, 102, 202) according to one of the claims 1 or 2, **characterized in that** the apparatus (2, 102, 202) comprises means (30, 130) for colour change of the light beam.

6. Apparatus (2, 102, 202) according to one of the claims 1-3, **characterized in that** the apparatus (2, 102, 202) comprises means (32) for pan and/or tilt of the light beam.

7. Apparatus (2, 102, 202) according to one of the claims 1-6, **characterized in that** the apparatus is divided into a first section and a second section, which first section contains the lamp chamber, and which second section contains electric power components and a control circuits for control of a lamp and/or servo motors, which second section contains power and data connections.

8. Apparatus according to claim 7, **characterized in that** the first section of the housing comprises a lamp chamber (10, 110, 210) having a bottom wall (14, 114, 214), below which bottom wall (14, 114, 214) the second section of the housing is placed containing a number of separate chambers (50, 52, 54, 150, 152, 154, 250, 256) is formed, where a first chamber (50, 150, 250) contains electronic power components, where a second smaller chamber (52, 152) contains control circuits for control of servo motors for adjustment of shape and/or colour and/or pan and/or tilt, where a third chamber (54, 154) contains power connection, where a fourth chamber (256) contains data connections.

9. Apparatus (2, 102, 202) according to claim 7, characterized **in that** the lamp chamber (10, 110, 210) and the first (50, 150, 250) and the second chambers (152) are open to a flow of air, and where the lamp chamber is tight towards the third (154) and the fourth chambers (256).

10. Apparatus (2, 102, 202) according to any one of the claims 1-8, **characterized in that** the first (150, 150, 250) and the second chambers (152) are separated by a cut through (260), which is open downwards to the surroundings, which cut through (260) is open towards the bottom wall (14, 114, 214) of the lamp chamber (10, 110, 210), where the bottom wall (14, 114, 214) in an area above the cut through (260) contains an opening (116, 217) covered by a diaphragm (262, 362).

11. Apparatus (2, 102, 202) according to claim 9, characterized **in that** the diaphragm (262, 362) is placed in a diaphragm holder (316), which diaphragm holder (316) is replaceable in an opening (217) in the bottom wall (14, 114, 214).

12. Apparatus according to claim 7, **characterized in that** the first and second sections are separated, where the second section is placed beside the first section for achieving access to the second section, where cables are connecting the first and the second section.

13. Method for preventing moisture build-up inside an illumination apparatus, which apparatus contains at least one lamp (20, 120), which lamp (20, 120) is surrounded by reflective means (24, 124), which apparatus are communicating with control means for controlling at least the lamp (20, 120), **characterized in that** the method comprises use of permeable means for moisture transmission from the inside of the apparatus to the outside and for transmission of dry air from the outside to the inside.